

**CHESTERFIELD COUNTY
PURCHASING DEPARTMENT
CHESTERFIELD, VIRGINIA
(804) 748-1617
September 27, 2007**



REQUEST FOR PROPOSAL #07-52910-9566

PROGRAMMING AND DESIGN SERVICES RELATIVE TO
SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)
SYSTEMS

DUE: October 29, 2007

*Request For Proposal Prepared By
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Senior Contract Officer
Purchasing Department
www.chesterfield.gov/ManagementServices/Purchasing/purchase.asp*

1. **PURPOSE**

- 1.1 **The purpose of this Request for Proposal (RFP) is to solicit qualified and interested firms to submit proposals for providing Professional Engineering Service relative to Supervisory Control and Data Acquisition (SCADA) Systems for the Chesterfield County Utilities Department on an as needed basis. The County reserves the right to award a contract to multiple firms. The selected engineers will be critical in supporting the operations of the Water and Wastewater operations of the Utilities Department, and providing assistance with the department's responsibilities to provide safe drinking water to the County's citizens and protect the environment.**

2. **GENERAL TERMS AND CONDITIONS**

- 2.1 Submittals, in **five (5)** copies, marked "**Programming and Design Services Relative to Supervisory Control and Data Acquisition (SCADA) Systems**" will be received no later than **5:00 P.M.**, Local Time Prevailing, on **October 29, 2007**, in:

Chesterfield County Purchasing Department
Administration Building, Room 402, Fourth Floor
9901 Lori Road
P. O. Box 51
Chesterfield, VA 23832-0001

- 2.2 Should you decide to utilize an express delivery service, please note that we are located at the Intersection of Ironbridge Road (State Route 10) and Lori Road. **Proposals will not be accepted via Fax machine or Internet E-mail.**
- 2.3 Mark outside of envelope with **RFP #07-52910-9566** and proposal subject, "**Programming and Design Services Relative to Supervisory Control and Data Acquisition (SCADA) Systems**".
- 2.4 Time is of the essence and any proposal or addenda pertaining thereto received after the announced time and date for submittal, whether by mail or otherwise, will be rejected. It is the sole responsibility of the offerors for ensuring that their proposals are stamped by Purchasing Department personnel before the deadline indicated in Section 2.1. Proposals and/or any addenda pertaining thereto, received after the announced time and date of receipt, by mail or otherwise, will be returned. However, nothing in this RFP precludes the County from requesting additional information at any time during the procurement process.
- 2.5 In the event that Chesterfield County government offices are closed due to inclement weather and/or emergency situations at the time set aside for a pre-proposal meeting and/or receipt of proposals, the pre-proposal meeting and/or published due date will default to the next open business day at the same time.
- 2.6 If you are an individual with a disability and require a reasonable accommodation, please notify the Purchasing Department at (804) 748-1617, three working days prior to need.
- 2.7 Nothing herein is intended to exclude any responsible firm or in any way restrain or restrict competition. On the contrary, all responsible firms are encouraged to submit proposals. The County reserves the right to award in part, in whole, and/or to award to multiple contractors, or to reject any or all proposals received. Any requirements listed herein are intended to describe qualifications, certifications and/or experience considered to be vital and should be used as guidelines for proposal submission. Firms not meeting specific requirements listed herein are

encouraged to list and/or demonstrate alternate qualifications, certifications and/or experience for consideration.

- 2.8 Any proposal submitted **MUST** include the Signature Sheet which has been signed by an individual authorized to bind the offeror. All proposals submitted without such signature may be deemed non-responsive.
- 2.9 RFP Process: Offerors are to submit written proposals which present the offeror's qualifications and understanding of the work to be performed. The offeror's proposal should be prepared simply and economically and should provide all the information which it considers pertinent to its qualifications for the project and which respond to the Scope of Services and Evaluation Criteria listed herein. Emphasis should be placed on completeness of services offered and clarity of content. Offeror is requested to respond to each section/subsection in the order in which it appears in the RFP.
- 2.10 For information pertaining to the award on this procurement transaction, offerors may access public notification electronically at www.chesterfield.gov/ManagementServices/Purchasing/purchase.asp.
- 2.11 Proprietary Information: Section 2.2-4342 F of the *Code of Virginia* states: "Trade secrets or proprietary information submitted by a bidder, offeror, or contractor in connection with a procurement transaction or prequalification application submitted pursuant to subsection B of §2.2-4317 shall not be subject to the Virginia Freedom of Information Act (§2.2-3700 et seq.); however, the bidder, offeror or contractor shall (i) invoke the protections of this section prior to or upon submission of the data or other materials, (ii) identify the data or other materials to be protected, and (iii) state the reasons why protection is necessary." Proposals not in compliance with section 2.2-4342 F will be subject to disclosure.
- 2.12 Total Quality Improvement Initiative: In order to continuously improve the efficiency and effectiveness of all public services provided, Chesterfield County has adopted and implemented the TOTAL QUALITY concept in its approach to organizational management. Listed herein for all prospective offerors to the County is an overview of the County's TOTAL QUALITY IMPROVEMENT (TQI) initiative. Offerors should review this information in order to familiarize themselves with the management philosophies and environment of the County prior to responding to Request for Proposals.

Chesterfield County is a leader in the application of innovative and successful management approaches. The County's leadership has resulted in numerous awards and broad recognition of the County and its employees. A constantly growing demand for additional and enhanced services has prompted the County to seek even higher levels of innovation and service excellence.

The TQI initiative is led by front line workers, supervisors, department directors, and the County's Leadership Group. Their intensive involvement in quality improvement demonstrates the County's commitment to the TQI values and principles of the initiative.

The TQI initiative includes specific guidelines for values and principles regarding the involvement of every employee within the organization. Implementation of TQI demonstrates the County's commitment to the importance of each individual.

A high standard of ethics, fairness, integrity, trust, responsibility, and creativity are integral concepts of the TQI Initiative. The County's organizational values center on customer focus, ethical behavior, teamwork, leadership, continuous improvement, open communications,

employee involvement, progressive thinking, and data driven decisions. Adherence to these values is expected of all employees of the County, and the County, therefore, expects that all vendors will strive for and continuously improve their customer service.

- 2.13 The County's Definition of Total Quality Improvement: TQI is the employee, customer, and team oriented approach to work, problem solving, and decision making that depends upon individual employee commitment to improving work processes through the analysis and utilization of data.
- 2.14 Chesterfield County's TQI Mission Statement: Providing a first choice community through excellence in public service. To achieve excellence, all employees of the County will participate in the continuous evaluation and quality improvement of our services in order to meet or exceed customer expectations.
- 2.15 Commitment to Diversity and Chesterfield Businesses: Chesterfield County is a growing progressive community consisting of an increasingly diverse population. This diversity provides for a dynamic and robust community that promotes growth. Chesterfield County believes that all of its citizens should benefit from this economic growth without regard to race, color, religion or economic status. The county is committed to increasing the opportunities for participation of minority-owned businesses, women-owned businesses, and businesses located in Chesterfield County to ensure diversity in its procurement and contract activities. These businesses are encouraged to respond to all Invitations for Bids and Requests for Proposals. In addition, the county strongly encourages each contractor and/or supplier with which the county contracts to actively solicit minority-owned businesses, women-owned businesses, and businesses located in the county as subcontractors/suppliers for their projects.

Upon award/completion of work, the County will require the contractor to furnish data regarding subcontractor/supplier activity with Minority-Owned Businesses (MOB), Women-Owned Businesses (WOB), and Chesterfield Businesses (CB) on a Certification of Subcontractor/Supplier Activity form. The form will be provided to the contractor by the Purchasing Department. This information will enable the County to document the dollar level of activity and measure the success of its purchasing and contracting efforts in this endeavor.

Definitions:

Women-Owned Business (WOB) - a business concern that is at least 51% owned by one or more women who are U. S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interests is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, and both the management and daily business operations are controlled by one or more women who are U.S. citizens or legal resident aliens. (*Code of Virginia 2.2-1401*)

Minority-Owned Business (MOB) – a business concern that is at least 51% owned by one or more minority individuals or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals. (*Code of Virginia 2.2-1401*)

Chesterfield Business (CB) - any private business enterprise, located within the jurisdictional boundaries of Chesterfield County.

- 2.16 Cooperative Procurement (Use of this contract by other public bodies): This procurement is being conducted by Chesterfield County in accordance with the provisions of 2.2-4304 of the Virginia Public Procurement Act (VPPA). Except for contracts for architectural and engineering services, if agreed to by the contractor, other public bodies may utilize this contract. The Contractor shall deal directly with any public body it authorizes to use the contract. Chesterfield County, its officials and staff are not responsible for placement of orders, invoicing, payments, contractual disputes, or any other transactions between the Contractor and any other public bodies, and in no event shall the County, its officials or staff be responsible for any costs, damages or injury resulting to any party from use of a Chesterfield County contract. Chesterfield County assumes no responsibility for any notification of the availability of the contract for use by other public bodies, but the Contractor may conduct such notification.
- 2.17 Non-Appropriation: The continuation of the terms, conditions, and provisions of this contract beyond the fiscal year is subject to approval and ratification by the Chesterfield County Board of Supervisors (and the Chesterfield County School Board, as applicable) and appropriation by them of the necessary money to fund said contract for each succeeding year.
- 2.18 Choice of Law and Venue: Any disputes under a resulting contract, that cannot be resolved between the County of Chesterfield and the contractor, must be resolved in the Circuit Court of Chesterfield County, Virginia. Any resulting contract shall be governed by the laws of the Commonwealth of Virginia.
- 2.19 Termination: It shall be the sole right of the County, to terminate any contract upon written notification to the Contractor.
- 2.20 Modification: The resulting contract shall not be amended, modified, or otherwise changed except by the written consent of the Contractor and the County given in the same manner and form as the original signing of this Contract.
- 2.21 Nondiscrimination Clause: In accordance with Section 2.2-4311 of the *Code of Virginia*, every contract for goods or services over \$10,000 shall include the following provisions:
- A. During the performance of this contract, the Contractor agrees as follows:
1. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.
 3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- B. The Contractor shall include the provisions of the foregoing paragraphs in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- 2.22 Right To Audit: Contractor's records shall be open to inspection and subject to audit and/or reproduction, during normal working hours, by the County to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by Contractor of any of its payees pursuant to execution of the contract. Such records subject to examination shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with this contract.

For the purpose of such audits, inspections, examinations and evaluations, the County shall have access to said records from the effective date of this contract, for the duration of the work, and until two (2) years after the date of final payment by the County to Contractor pursuant to this contract.

The County shall have access to Contractor's facilities, shall have access to all necessary records, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this article. The County shall give Contractor reasonable advance notice of intended audits.

Contractor shall require all subcontractors, insurance agents, and materials suppliers (payees) to comply with the provisions of this article by insertion of the requirements hereof in a written contract agreement between Contractor and payee. Failure to obtain such written contracts which include such provisions shall be reason to exclude some or all of the related payees' costs from amount payable to Contractor pursuant to this contract.

If an audit inspection or examination in accordance with the article, discloses overcharges (of any nature) by Contractor to the County in excess of five percent (5%) of the total contract billings, the actual cost of the County's audit shall be paid by Contractor.

- 2.23 Insurance: The contractor shall purchase and maintain in force, at his own expense, such insurance as will protect him and the County from claims which may arise out of or result from the Contractor's execution of the work, whether such execution be by himself, his employees, agents, subcontractors, or by anyone for whose acts any of them may be liable. The insurance coverage shall be such as to fully protect the County, the Engineer (if applicable) and the general public from any and all claims for injury and damage resulting by any actions on the part of the contractor or his forces as enumerated above. The Contractor shall furnish a Certificate of Insurance, naming Chesterfield County as additional insured . Should any of the policies be canceled before the expiration date, the issuing company will mail 30 days written notice to the certificate holder. The Contractor shall furnish insurance in satisfactory limits, and on forms and of companies which are acceptable to the County's Attorney and/or Risk Management and shall require and show evidence of insurance coverages on behalf of any subcontractors (if applicable), before entering into any agreement to sublet any part of the work to be done under this Contract.
- 2.24 Instructions Regarding Insurance Certificates: The Contractor and his insurance company should carefully review the insurance requirements applicable to this job. All requirements must be met before the County will execute the contract. In particular, we would call your attention to the following:
- A. Please note that the Insurance Certificate must state that the Commercial General Liability and the Umbrella Liability Insurance Policies name **Chesterfield County** as additional insured. This requirement may be met by placing the following language on the Certificate. Many Certificates have a space headed "**Description**" where the language may be inserted as follows:

**Chesterfield County is additional insured or that
Chesterfield County is additional insured with respects to General
Liability; and/or Umbrella Liability policies.**

- B. The Insurance Certificate must also contain the required statement concerning notice of cancellation or other change in coverage. The statement used on some Certificate forms is not acceptable. The statement which is required by the contract documents reads as follows:

"Such certificate shall provide that in the event of the cancellation of the policy or policies listed on such certificate, not less than 30 days notice in writing shall be given to the County."

NOTE: This requirement may be achieved through modifications to the cancellation clause by striking the words 'endeavor to' in the second line and by striking the clause reading 'but failure to mail such notice shall impose no obligation or liability of any kind upon the insurer, its agents or representatives.' OR In lieu of modifying the cancellation clause, Chesterfield County may be listed an additional insured as an endorsement to the policy or by endorsement to the policy the insurer will provide 30 day cancellation notice to Chesterfield County. The endorsement should be on a separate form and attached to the certificate.

- C. The Certificate Holder should be listed as:

Chesterfield County
c/o Purchasing Department
P. O. Box 51
Chesterfield, VA 23832-0001
IFB/RFP #

- D. Certificate of Insurance must be signed.

2.25 Drug Free Workplace: During the performance of this contract, the contractor agrees to:

- A. Provide a drug-free workplace for the contractor's employees
- B. Post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition
- C. State in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace
- D. Include the provisions of the foregoing clauses in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the

performance of the contract.

- 2.26 Environmental Management: Contractor shall be responsible for complying with all applicable federal, state, and local environmental regulations, if any. Additionally, the Contractor must meet all Chesterfield County Environmental Management System (EMS) requirements. For questions or additional information, contact the Office of Environmental Management at (804) 717-6531.
- 2.27 Faith-based Organization: Chesterfield County does not discriminate against faith-based organizations in accordance with the *Code of Virginia*, Section 2.2-4343.1.
- 2.28 Finance Charges: Chesterfield County will not pay any finance charges imposed on any invoices submitted by the contractor relative to this RFP.
- 2.29 Contractor Background Checks: In order to preserve the integrity and security of county government operations, contract workers may be required to undergo a criminal background check conducted by Chesterfield County. The County will conduct these checks for any worker it believes will have unsupervised access to County designated Security Sensitive areas. Contract workers providing goods, services or construction in these designated areas are required to confine themselves to the area of the work. Based on the results of the background check, the contract worker may be disqualified from providing work/services for Chesterfield County.
- 2.30 Sensitive Information Handling: Any information in the possession of the county/schools which is specific to a student, citizen, county/school business function, private business entity or other government entity which is not generally available to the public shall be designated Sensitive Information. Contract workers will under no circumstances remove Sensitive Information from county facilities. Any Sensitive Information which must reside temporarily on a hard drive or portable storage device (USB Key, CD ROM, memory card, etc.) for processing must remain within the county facility. No Sensitive Information may be remotely accessed by contract workers by dial in, VPN, web interface or other means without expressed consent of the department head and the Information Security Manager (county) or Director of Technology (schools). Any access to county/schools information by contract workers from outside the county intranet shall be in accordance with existing Information Systems Technology (IST)/Chesterfield County Public Schools (CCPS) Technology department security policies and procedures. Contract worker network connected computer equipment will be subject to all applicable IST/CCPS policies and procedures. Any exception to this application of policies shall be approved by the CCPS Department of Technology / county Information Security Manager and Chief Information Officer or designees.

3. **BACKGROUND**

- 3.1 Chesterfield County Utilities Department operates two Supervisory Control and Data Acquisition (SCADA) Systems that control the water and wastewater systems for the County. The County's Water SCADA system currently monitors thirteen water pump stations, twenty-two water tanks, five meter vaults and one water plant; this system collects data, controls the operation of the remote, unmanned sites, and records system information at the central monitoring system at the manned water plant. The wastewater SCADA system currently supports twenty-four wastewater pump stations, two odor control vaults and two wastewater plants; this system collects data from the remote, unmanned sites, and provides that data to one of the staffed wastewater plants. In addition, there are several "office" locations around the county where supervisory/monitoring sites are located. Both SCADA systems are primarily radio-based with some hardwired phone communication and minimal satellite communications.

- 3.2 The ability to understand processes associated with water distribution and treatment and wastewater collection and treatment systems and translate this understanding into complex machine-based logic is critical. This understanding includes, but is not limited to, pump alternation, odor control, chemical feed calculation/dosing, power source alternation, facility security, flow monitoring/calculation, PLC system networking and remote communication via radio and modem-based telemetry. In addition, the ability to respond quickly, including after-hours and on weekends is critical to the successful continued operation of the County's water and wastewater systems.
- 3.3 The equipment currently in use by the County includes, but is not limited to, Modicon and Allen Bradley PLC's (RS-Logix Software), Siemens PLC's (S7 Software), Micrologix and Contrologix PLC's, Ethernet/Modbus Plus networking and Siemens, AB and Square-D Variable Frequency Drives. The County also utilizes Microsoft based technology solutions.
- 3.4 Services to be performed under the resulting contract may be required at any of the Chesterfield County Utility locations and on any of the equipment currently in use by the County. In some instances, an immediate response may be required.

4. **SCOPE OF SERVICES**

- 4.1 The services outlined in this solicitation are specifically related to the existing County's Water and Wastewater SCADA Systems whose operation is the sole responsibility of the Chesterfield County Utilities Department. The engineer will be responsible for providing all professional engineering and technical services to evaluate, support, upgrade, configure, program and commission the supervisory control and data acquisition systems (SCADA) and PLC software/hardware/network, telemetry, programmable logic controllers (PLC), panels, and process input instrumentation as needed.
- 4.2 Project specific services will be negotiated at time of assignment and can range from recommending specifications of equipment for direct purchase by the County to designing complete systems. Offerors should indicate their ability to provide the services listed below.

A. Study and Preliminary Design Phase

- 1. Consult with the County to determine its requirements of the assignment and review available data in possession of the County.
- 2. In consultation with County and on the basis of all information, determine the scope of the project.
- 3. Perform all necessary research and field work.
- 4. Prepare preliminary design documents and opinion of probable cost of design and construction.
- 5. Present and review preliminary design documents and opinion of probable cost with the County.

B. Final Design Phase

- 1. Upon completion and acceptance by Utilities of the Study and Preliminary Design Phase, prepare all such documents, plans and design data as may be required for and

assist in the preparation of the required documents so that the County may obtain approvals of all such governmental agencies and authorities that have jurisdiction.

2. Prepare all such final construction plans and specifications for the individual project. This should include any necessary Professional Engineering License stamping required by the state of Virginia.
3. Prepare and furnish bid documents (drawings, specifications, etc.) in conjunction with the County's Purchasing Department, and assist in the preparation of other related documents as necessary.

C. Bidding and Negotiation Phase

1. Supply the County with a minimum of six (6) sets of all design documents including plans and specification for both the SCADA system and any third-part install. One set should be in an electronic, reproducible, editable format.
2. Assist County in obtaining bids for each prime contract.
3. Consult with and advise County as to the acceptability of sub-contractors and other persons and organizations proposed by the prime contractor.
4. Consult with and advise County as to the acceptability of substitute materials and equipment proposed by bidder.
5. Assist the County in evaluating bids, negotiating with bidders when applicable, and in assembling and awarding contracts, if necessary.

D. Construction Phase

1. Consult with and advise County and act as its representative as normally expected of professional engineers.
2. Make periodic visits to the site, as necessary, to observe the progress and quality of the executed work and provide assurance to the County in writing that the completed project will conform to the contract. Written observations should detail the progress of work, guard the County against defects and deficiencies in the work of the contractor(s) whenever possible, notify the County of any observed defects or deficiencies in the work of the contractor(s), and disapprove or reject work as failing to conform to the contract, if necessary.
3. Provide six (6) sets of "As-Built" drawings and programming, in both paper drawing and computer format. Copies of all programming should be in both hard and soft form.

E. Other

1. Provide the programming of the software and controllers installed by third parties.
2. When required, commission the software, hardware, panels and field instrumentation supplied by contractor, ensuring that the equipment and facility are properly functioning and satisfactorily installed to achieve proper communication among the equipment. Train County Operations and Maintenance personnel in proper use and

diagnostics of system provided to allow troubleshooting and simple problem solving by County personnel.

3. Assist County personnel in solving more complex problems.
4. Provide on-site diagnostic and programming fixes as needed at the request of the County.
5. Advise the County of requirements to fix hardware/panel problems.

5. **QUALIFICATIONS OF THE CONTRACTOR**

5.1 Offerors should address their ability to meet the following minimum qualifications:

- A. Provide factory trained and certified engineers for programming and configuring the Modicon Quantum/Momentum/Compact PLC's using Concept, ProWorxNXT and Unity software. Offerors should indicate if they are an authorized system integrator for Modicon PLC's with a minimum of two trained staff in-house. Indicate if the proposed engineers or technicians are factory-trained by Schneider Electric official trainers and capable of programming and following IEC 1131-3 programming standard.
- B. Provide factory trained and certified engineers and technicians for programming and configuring the iFix SCADA software, i historian database and Infoagent software who are authorized certified system integrators for GE Automation products **OR** for programming and configuring DYNAC® SCADA software and are trained at the licensor's facility by an authorized trainer and have a minimum of two trained staff in-house.
- C. Provide in-house engineers to support county's existing SCADA infrastructure who possess C++ experience; provide a Database Analyst who can configure SQL based reports; and provide engineers with recorded experience of successful completion of a minimum 500 I/O system.
- D. Provide factory trained or experienced engineers and technicians to program or support the existing MOTOROLA (MOSCAD/INTRAC) and MDS iNET telemetry system. Offerors should indicate if they are an authorized system integrator for Microwave Data System (MDS) and have a minimum of two trained staff in-house, capable of developing radio path profiles and site surveys for the remote sites.
- E. Possess ability to coordinate and satisfy the requirement of County Information system group while developing or supporting the applications for Utilities and be an authorized Microsoft Certified System partner with a minimum of two Microsoft certified engineers in-house.
- F. Provide ISA-certified technicians to calibrate and repair field and process inputs who are certified to a minimum of level 1 by the Instrumentation Society of America.
- G. Provide qualified engineers and technicians who are available by telephone for emergency assistance to Operations personnel on a 24 hour per day, 7 days per week basis and able to provide on-site assistance as needed by the county.
- H. Provide office, field personnel, engineers and technicians who are qualified in all respects to provide services to the county. The engineers and technicians assigned will support the specific needs of the Utilities Department Systems. Personnel assigned to Chesterfield

County projects will form a critical element in the successful operation of the County's water distribution and treatment and wastewater collections and treatment.

6. INDIVIDUAL PROJECT ASSIGNMENTS

6.1 Selection of Engineer

Individual work assignments will be negotiated for each specific project on an as needed basis. It shall be the sole decision of the Chesterfield County Utilities Department regarding which engineer the assignment is awarded to. The County reserves the right to perform work in-house or to award large projects through a separate procurement action.

6.2 Compensation and Method of Payment

As full payment and compensation for the performance and completion of work acceptable to the County for each project, the County will pay the engineer in accordance with the sum determined for the individual project assignment. All work shall be performed for each project and shall be done on a lump-sum, not-to-exceed basis or the fee shall be negotiated prior to assignment by incorporating a maximum hourly fee charge. Total fee shall include all expenses for performing the necessary work, including professional fees. Reimbursable expenses, which shall be the actual expenses incurred in connection with the work performed for transportation, and sustenance incidental thereto, toll telephone calls and telegrams, reproduction of reports, drawings and specifications and computer time shall be estimated at the time of negotiation with actual expenses added to invoices.

6.3 Performance Schedule

The engineer shall perform work in accordance with a performance schedule negotiated at the time of project assignment. The engineer shall assign the work to qualified personnel in sufficient numbers to complete the work according to the performance schedule. The engineer shall designate one employee to oversee each project. The designated employee shall work continuously on the project until final reports are accepted by the County.

6.4 Changes in Performance Schedule

The County may make changes to the work previously negotiated for an individual assignment. If any such change increases or decreases the time required to perform the work, the performance schedule will be adjusted accordingly. The engineer shall not be entitled to adjustments for changes in work that in the opinion of the County do not result in an increase in the engineer's cost of performing the work. Any changes in the scope of work for project assignments and performance of any additional services shall proceed only with express written authorization of the County.

7. CONTRACT TERM

7.1 The initial term of the resulting contract shall be for a period of one year effective at the time of award.

7.2 At the time of contract expiration, the engineer shall complete, at the discretion of the County, any assignment undertaken, but not yet completed. The engineer will be compensated for all such work undertaken and completed to the satisfaction of the County.

8. RENEWAL OF CONTRACT

- 8.1 The resulting contract may be renewed by the County for four (4) successive one year periods under the terms and conditions of the original contract except as stated in A. and B. below. Price increases may be negotiated only at the time of renewal. Upon a determination by the County to renew this contract for an additional term, written notification will be given to the Contractor.
- A. If the County elects to exercise the option to renew the contract for an additional one-year period, the contract price(s) for the additional one year shall not exceed the contract price(s) of the original contract increased by more than the percentage increase of the other services category of the Consumer Price Index (CPI) of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available. The source for this index shall be <http://www.bls.gov/cpi>.
 - B. If during any subsequent renewal periods, the County elects to exercise the option to renew the contract, the contract price(s) for the subsequent renewal period shall not exceed the contract price(s) of the previous renewal period increased by more than the percentage increase of other services category of the Consumer Price Index (CPI) of the United States Bureau of Labor Statistics for the latest twelve months for which statistics are available. The source for this index shall be <http://www.bls.gov/cpi>.

9. PROFESSIONAL STANDARD

- 9.1 Offerors should demonstrate their ability to:
- A. Perform all tasks in accordance with generally accepted professional standards.
 - B. Provide to the County the best possible advice and consultation within engineer's authority and capacity as a professional engineer.
 - C. Comply with all applicable regulations, laws, ordinances and requirements of all applicable governmental agencies and authorities.
 - D. Assign work to be performed to qualified personnel in sufficient numbers to meet negotiated performance schedules.

10. COUNTY RESPONSIBILITIES

- 10.1 The County shall:
- A. Provide all information in possession of the County which relates to the County's requirements for individual projects.
 - B. Examine all studies, test results, reports, sketches, drawings and proposals and any other documents presented by the engineer.
 - C. Designate a person to act as the County's representative with respect to the work to be performed for each assignment. Such person shall have the authority to transmit instructions, receive information, define County policies and directives with respect to the project and its material, equipment, elements and systems.

11. PROPOSAL INCLUSIONS

11.1 Offerors should include the following information as part of their proposal:

- A. A list of approximately four different clients for whom similar SCADA projects have been performed, who could attest to the quality of previous work, timeliness, diligence and ability to meet budget and schedule. Include contact persons, addresses and telephone numbers.
- B. Resumes of engineers/technicians who will perform programming and configuring of the Modicon Quantum/Momentum/Compact PLC's.
- C. Resumes of engineers/technicians who will perform programming and configuring of the iFix SCADA software, i historian database and Infoagent software or of the DYNAC SCADA software.
- D. Resumes of engineers/technicians who will program or support the existing Motorola (MOSCAD/INTRAC) and MDS iNET telemetry systems.
- E. Resumes of technicians who will calibrate and repair field and process inputs.
- F. Resumes of all other key individuals of the firm and of any subconsultants who would be involved in providing services under this contract. Resumes should adequately describe educational background, specific area of expertise, physical location, role/responsibility for this contract and related experience.
- G. Identification of personnel who will provide telephone and on-site support and consultation.
- H. A typical project plan including organization of the project, proposed means of communication, major tasks, schedule for tasks, staffing, administrative procedures, and coordination of interdisciplinary teams.

12. QUALITY COMMITMENT

- 12.1 Chesterfield County has adopted best management practices to ensure the highest quality of products and services are provided to its citizens. With this goal in mind, offerors are required to demonstrate they possess and utilize appropriate quality management systems which result in customer satisfaction and continuous improvement.
- 12.2 To satisfy these requirements, the offeror must demonstrate their firm's commitment to best management practices and providing services with the highest possible level of quality throughout all phases of work. Proposals must demonstrate, at a minimum, (1) a complete understanding of the processes utilized within the organization to ensure quality and (2) graphical demonstrations that outline quality and process management within the organization and how they relate with subconsultants and with the County. These criteria shall not be satisfactorily met by indicating that the firm has a quality control process or manual that meets the goals that have been established by Chesterfield County. The response to quality must be deliberate and contain sufficient evidence that the firm has adopted quality and best management practices as an integral part of the organization. As a part of the response to this request, offerors shall demonstrate the following:
 - A. Show the organization's design process, e.g. process map, flow charts.

- B. Show cycle time for process, e.g. Gantt chart, milestone chart.
- C. Show historical data on budget and change orders, e.g. Pareto charts identifying the reasons for all change orders and frequency of occurrence.
- D. Demonstrate processes in place to recognize, track and analyze project change orders due to errors and omissions (including those caused by any sub consultants) and discuss how these processes are utilized to minimize future occurrences.
- E. Demonstrate customer satisfaction data, e.g. Indicate that there are systems in place allowing for a proactive approach to collecting customer satisfaction data. Demonstrate how this data is collected and analyzed and what actions are taken on the data results.

13. **EVALUATION CRITERIA**

13.1 These criteria are to be utilized in the evaluation of qualifications for development of the shortlist of those offerors to be considered for interviews and/or negotiations. Individual criteria will be assigned varying weights at the County's discretion to reflect relative importance. Offerors are required to address each evaluation criterion in the order listed and to be specific in presenting their qualifications.

- A. Ability of the offeror and their subconsultants, if applicable, in performing SCADA related projects.
- B. Specific qualifications of all staff to be assigned to County projects under the resulting contract.
- C. Managerial capabilities including typical approach to individual projects; approach to problem/task resolution; and methodology/data gathering techniques and procedures.
- D. Demonstrated experience of the offeror to complete projects on time and within budget in water and wastewater SCADA applications similar to Chesterfield County Utilities Department.
- E. Demonstration of quality commitment as outlined in section 12

14. **AWARD PROCEDURE**

14.1 The County shall engage in individual discussions with two or more offerors deemed fully qualified, responsible, and suitable on the basis of initial responses and with emphasis on professional competence, to provide the required services. Repetitive informal interviews shall be permissible. Such offerors shall be encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project, as well as alternative concepts. At the discussion stage, the County may discuss non-binding estimates of total project costs, including, but not limited to, life-cycle costing, and where appropriate, non-binding estimates of price for services. Proprietary information from competing offerors shall not be disclosed to the public or to competitors. At the conclusion of discussion, outlined in this paragraph above, on the basis of evaluation factors published in the Request for Proposal and all information developed in the selection process to this point, the County shall select in the order of preference two or more offerors whose professional qualifications and proposed services are deemed most meritorious. Negotiations shall then be conducted, beginning with the offeror ranked first. If a contract satisfactory and advantageous to the public body can be negotiated at a price considered fair and reasonable, the award shall be made to that offeror. Otherwise,

negotiations with the offeror ranked first shall be formally terminated and negotiations conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price. Should the County determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified and suitable than the others under consideration, a contract may be negotiated and awarded to that offeror.

15. REFERENCES

- 15.1 References may or may not be reviewed or contacted at the discretion of the County. Typically, only references of the top ranked shortlisted offeror or offerors are contacted. The County reserves the right to contact references other than, and/or in addition to, those furnished by an offeror.

16. NO CONTACT POLICY

- 16.1 After the date and time established for receipt of proposals by the County, any contact initiated by an offeror with any County representative, other than the Purchasing Department representative listed herein, concerning this Request for Proposal is prohibited. Any such unauthorized contact may cause the disqualification of the offeror from this procurement transaction.

17. FURTHER INFORMATION

- 17.1 Questions of a technical nature which may arise as a result of this Request for Proposal may be directed to Anne C. Wright, Senior Engineer, (804) 768-7582. Any other questions may be directed to Donna R. Clarke, CPPB, Senior Contract Officer, (804) 748-1837 or by Internet E-mail to purchasing@chesterfield.gov.

SIGNATURE SHEET

My signature certifies that the proposal as submitted complies with all Terms and Conditions as set forth in **RFP #07-52910-9566**.

My signature also certifies that the accompanying proposal is not the result of, or affected by, any unlawful act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under Title 18.2, Chapter 12, 498.4 of the *Code of Virginia*, 1950 as amended. Furthermore, I understand that fraud and unlawful collusion are crimes under the Virginia Governmental Frauds Act, the Virginia Government Bid Rigging Act, the Virginia Antitrust Act, and Federal Law, and can result in fines, prison sentences, and civil damage awards.

My signature also certifies that this firm has no business or personal relationships with any other companies or persons that could be considered as a conflict of interest or potential conflict of interest to the County of Chesterfield, and that there are no principals, officers, agents, employees, or representatives of this firm that have any business or personal relationships with any other companies or persons that could be considered as a conflict of interest or a potential conflict of interest to the County of Chesterfield, pertaining to any and all work or services to be performed as a result of this request and any resulting contract with the County of Chesterfield. Furthermore, offeror is in compliance with the *State and Local Government Conflict of Interests Act 2.2-3100*, supplemented by Article 6, 2.2-4367-69 of the *Code of Virginia*. Specifically, no county employee, county employee's partner, or any member of the county employee's immediate family holds a position with the offeror such as an officer, director, trustee, partner or the like, or is employed in a capacity involving personal and substantial participation in the procurement transaction, or owns or controls an interest of more than five per cent.

To receive consideration for award, this signature sheet must be returned to the Purchasing Department as it shall be a part of your response.

Complete Legal Name of Firm: _____

Address: _____

Federal Tax ID Number: _____

Signature of Authorized Representative: _____

Typed Name and Title: _____

Please provide the primary contact person for questions and concerns relative to this project:

Contact Name and Title: _____

Phone: (____) _____ **Fax:** (____) _____ **Email:** _____

We hereby provide the following information to Chesterfield County regarding our business. We understand that it is provided for statistical purposes only and all firms submitting proposals will receive equal consideration.

Minority-Owned Business: Yes _____ No _____

Women-Owned Business: Yes _____ No _____

Chesterfield Business: Yes _____ No _____